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GAMING SYSTEM WITH WAGER LOCATION

Field of the Invention

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This invention relates to a gaming system and, more particularly, to a gaming system that can be used by a plurality of players to play any one of a selection of available games on which wagers may be placed. The invention extends to a method of operation of the gaming system.

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Background to the Invention

Gaming systems are known that enable a plurality of players to play separate
20   instances of a game of chance. Each player is able to place a wager on each turn of his own particular instance of the game. An outcome of the turn of the game is determined by the system and displayed to the player and the system settles the wager as a function of the outcome according to the rules of the game of chance being played.

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Such prior art gaming systems may be, at a simplest level, one or more stand-alone gaming machines that can be located in a land-based casino or some other entertainment venue such as a betting shop. In this instance, the turnover and gross win arising from each gaming machine may be recorded manually and
30   logged by an operator of the gaming system. In another prior art gaming system, the plurality of gaming machines located at the entertainment venue may each be linked by means of a local-area network ("LAN") to an administration facility that automatically records the financial performance of each gaming machine. It is also known to extend this latter type of topology outside the confines of a single
35   entertainment venue and to have gaming machines that are geographically dispersed, some of which may be located in rural or disadvantaged areas. In this

5   particular topology, the gaming machines are linked to the administration facility
        by means of a wide-area network ("WAN").

        It is a disadvantage of such prior art gaming systems that the financial
        performance of the system can only be determined and analysed to a resolution
10   that corresponds to each individual gaming machine. It is desirable to analyse the
        performance of a gaming system according to criteria other than individual
        gaming machine.

15   Object of the Invention

        It is an object of this invention to provide a gaming system, and a method of
        operation of a gaming system that will, at least partially, alleviate the
        abovementioned difficulties and disadvantages.
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        Summary of the Invention

        In accordance with this invention there is provided a gaming system, comprising:
25   a gaming server;
        a plurality of player stations remote from the gaming server, each player station
        being capable of rendering to a player a simulation of at least one game of
        chance and enabling the player to place a wager on a turn of the at least one
        game of chance; and
30   a communication network capable of providing communication between the
        gaming server and the plurality of player stations
        characterised in that
        the gaming server records transaction data relating to each wager placed by any
        player on each turn of the at least one game of chance, the transaction data
35   including at least the size of the wager, the time and date of the wager, an
        outcome of the turn of the game of chance, a geographic location of the player

5   station on which the wager was placed by the player, and a status of the wager, the status being successful if the outcome of the turn of the game is a favourable outcome, and the status being unsuccessful if the outcome of the turn of the game is not a favourable outcome.

10   Further features of the invention provide for each player station to have a unique identification code, for the geographic location of any player station to be stored in a player station database associated with the gaming server, the player station database being indexed according to the unique identification codes of the plurality of player stations, and for the gaming server to derive the geographic
15   location of any player station from the player station database by means of the unique identification code of that player station as an index.

     Still further features of the invention provide for the gaming server to maintain a register of all players who utilise the gaming system to play the at least one game
20   of chance, for the register to store, for each player, a player identity and a corresponding unique code of at least one player identification token, for the player identification token to be any one of an identification card, a driver's licence, a credit card or a debit card, and for each player terminal to require any player to be identified before commencing play of the at least one game of
25   chance, the transaction data relating to any wager including an identity of the player who placed that wager.

     Yet further features of the invention provide for the gaming system to include an administration facility communicable with the gaming server by means of the
30   communication network, the administration facility being configurable to determine at least one of:
     (a) a total gross win or loss for each individual player in the register; and
     (b) a total gross win or loss for each one of the plurality of player stations of the gaming system, and for the administration facility to be still further configurable to
35   determine at least one of:

5   (c) a gross win or loss for all player stations whose geographic location falls
       within a selectable geographical area; and
       (d) a total gross win or loss for all the player stations together.

       There is further provided for the administration facility to accumulate, in an
10   accumulation account, a proportion of all wagers placed by any player on any of
       the plurality of player stations whose geographic location falls within a selectable
       geographic area, and for the administration facility to reimburse, out of the
       contents of the accumulation account, a community in the selectable
       geographical area in respect of the gross loss at all player stations whose
15   geographic location falls within the selected geographic area, alternatively for the
       administration facility to reimburse the community in respect of a total of all
       wagers placed at any player station whose geographic location falls within the
       selected geographic area.

20   There is further provided for any player station to accept wagers in one of a
       number of different standard wager denominations, each one of the number of
       different standard wager denominations being a predetermined integral or
       fractional number of units of credit, for the player station database to store, for
       each player station, a corresponding standard wager denomination for wagers
25   placed by the player at that player station, and for the administration facility to
       derive the wager denomination of any particular player station from the player
       station database by means of the unique identification code of that player station
       as an index.

30   There is still further provided for each player station to have a processor and a
       display monitor on which the simulation of the at least one game of chance is
       rendered to the player, for the player station to have any one or more of a coin
       acceptor, a banknote validator, a keypad and a printer, and for the
       communication network to be the Internet.

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5   The invention extends to a method of operation of a gaming system, comprising
        the steps of:
        providing a gaming server, a plurality of player stations remote from the gaming
        server, and a communication network capable of providing communication
        between the gaming server and the plurality of player stations ;
10   rendering to a player, on a player station, a simulation of at least one game of
        chance;
        enabling the player to place a wager on the turn of the at least one game of
        chance at the player station;
        determining an outcome of the turn of the at least one game of chance; and
15   recording transaction data relating to each wager placed by the player on the turn
        of the at least one game of chance, the transaction data including at least the
        size of the wager, the time and date of the wager, an outcome of the turn of the
        game of chance, a geographic location of the player station on which the wager
        was placed by the player, and a status of the wager, the status being successful
20   if the outcome of the turn of the game is a favourable outcome, and the status
        being unsuccessful if the outcome of the turn of the game is not a favourable
        outcome.

        There is also provided for assigning a unique identification code to each player
25   station, for storing a geographic location of any player station in a player station
        database, the player station database being indexed according to the unique
        identification codes of the plurality of player stations, and for deriving the
        geographic location of any player station from the player station database by
        means of the unique identification code of that player station as an index.
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        There is further provided for maintaining a register of all players who utilise the
        gaming system to play the at least one game of chance, for storing, for each
        player in the register, a corresponding player identity and a corresponding unique
        code of at least one player identification token, and for requiring a player to be
35   identified before commencing play of the at least one game of chance, and

5   including in the transaction data relating to any wager, an identity of the player
       who placed that wager.

       There is still further provided for configuring the gaming system to determine at
       least one of:
10   (a) a total gross win or loss for each individual player in the registry; and
       (b) a total gross win or loss for each one of the plurality of player stations of the
       gaming system, and for still further configuring the gaming system to determine
       any one of
       (c) a gross win or loss for all player stations whose geographic location falls
15   within a selectable geographical area; and
       (d) a total gross win or loss for all the player stations together.

       There is yet further provided for accumulating, in an accumulation account, a
       proportion, preferably three percent, of all wagers placed by any player on any
20   one of the plurality of player stations whose geographic location falls within a
       selected geographic area, for reimbursing, out of the contents of the
       accumulation account, a community in the selected geographic area in respect of
       the gross loss at all player stations whose geographic location falls within the
       selected geographic area, alternatively for reimbursing the community in respect
25   of a total of all wagers placed at any player station whose geographic location
       falls within the selected geographic area.

       There is also provided for accepting wagers in one of a number of different
       denominations, each one of the number of different denominations being a
30   number of predetermined integral or fractional number of units of credit, for
       storing, for each player station, a corresponding denomination for wagers
       accepted at that player station, and for deriving the wager denomination of any
       particular player station from the player station database by means of the unique
       identification code of that player station as an index.

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5   Brief Description of the Drawings

       A preferred embodiment of the invention is described below, by way of example
       only, and with reference to the accompanying drawings, in which:

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       Figure 1 is schematic diagram of a gaming system according to the invention;
       and

       Figure 2 is a schematic representation of a player station of the gaming system of
15   Figure 1.

       Detailed Description of the Invention

20   Referring to Figure 1, a gaming system is indicated generally by reference
       numeral (1).

       This embodiment of the invention will be described with particular reference to a
       game of chance that is a single-player 3-reel video slots game. It is to be clearly
25   understood, however, that the invention extends to include the use of other types
       of single-player games of chance, such as video poker, for example.

       The gaming system (1) includes a gaming server (2), and a plurality of player
       stations (3), only one of which is shown, located remotely from the gaming server
30   (2). Communication between the player stations and the gaming server (2) is
       provided by means of a communication network (4) that is, in this embodiment,
       the Internet. Each player station (3) includes an Internet-enabled processor (5), a
       display monitor (6), a numeric keypad (7), a pushbutton panel (8), a coin
       acceptor (9), a banknote validator (10) and a thermal printer (11). The Internet-
35   enabled processor (5) operates under a Windows XT operating system, which is
       well known and commercially available from the Microsoft Corporation of Seattle,

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5   Washington, USA. The gaming server (2) operates under the Windows NT
       operating system, which is also a product of the Microsoft Corporation.

       The gaming system (1) enables a player to play a game of 3-reel video slots at
       any one of the player stations (3). A number of different players may play the
10   game of video slots simultaneously, with each player playing from a different
       player station (3). It is anticipated that the player stations (3) would be placed at
       different locations throughout a geographic region, such as entertainment
       venues, shopping centres, games arcades, cinemas, night clubs, betting shops
       and the like. Each player station (3) is identified by a unique identification code
15   and the geographical location of each player station is known. The geographical
       location need not be known accurately by means of geographical co-ordinates,
       but merely at the level of village, or town and suburb, district, region and
       province.

20   The gaming system (1) includes, further, an administration facility (14) in the form
       of an application web server, which is communicable with the gaming server (2)
       by means of the communication network (4). The detailed operation of the
       application web server (14) will be outlined in the description that follows.

25   The Internet-enabled processor (5) in each player station (3) executes a
       respective client process (12) in the form of a computer program that renders to a
       player a simulation of the three-reel video slots game on the display monitor (6)
       of the player station. The gaming server (2) executes a server process (13),
       which is a further computer program that generates random events that
30   determine the outcome of turns of the video slots game. The operation of the
       client and server processes (12 and 13) will be described in greater detail in the
       description that follows. The server process (13) generates, upon request of the
       client process (12), a random event that determines the outcome of a turn of the
       video slots game, in particular, the outcome of a spin of the reels of the three-reel
35   video slots game in the player's particular turn of the game. The client process
       (12) of the particular player station (3) obtains the result of the random event from

5   the gaming server (2), along the communication network (4), and displays the
       outcome of the turn of the game to the player on the display monitor (6) of the
       player station (3) in an intelligible manner, by simulating on the monitor an
       animation of three spinning reels that come to rest at appropriate indexed
       positions corresponding to the generated outcome.

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       The client process (13) also allows the player to make a wager on a turn of the
       game of video slots, and to effect decisions that determine the progress of the
       game, by using appropriate buttons on the pushbutton panel (8) of the player
       station (3). In this particular embodiment, the pushbutton panel button has

15   buttons labelled "BET 1", "BET MAX" and "SPIN", respectively. The use of these
       pushbuttons, which is the same as that found in a conventional, freestanding slot
       machine is well known in the art and will not, for this reason, be described here in
       detail.

20   The gaming server (2) maintains a register, or player database (15), of players
       who have used the gaming system (1) to play the game of video slots. The
       player database (15) contains, for each player, an identity of the player, a
       corresponding unique code of an identification token belonging to the player, and
       a corresponding credit account balance. The player identification token can be

25   any one of an identification card, a driver's licence, a credit card or a debit card,
       the only requirement being the uniqueness of the code of the player's
       identification token. In order to utilise the gaming system (1) to play the game of
       video slots, a player is required to first identify himself or herself before being
       allowed to commence wagering and playing at a player station (3). A first-time

30   user of the gaming system (1) is required to complete a registration process and
       have his particulars added to the player database (15) before such a player is
       eligible to commence wagering and play. The player database (15) is indexed by
       player identification code.

35   The client process (12) of a player station (3) enables a player to place a wager
       on a turn of the three-reel slots game by means of the "BET 1" and "BET MAX"

5   buttons on the pushbutton panel (8). The wagers placed by players utilising the
        gaming system (1) are made with credit purchased by such players prior to their
        participation in the game. For this purpose, a player may purchase credit by
        inserting coins in the coin acceptor (9) of a player station (3) and by inserting
        banknotes into the banknote validator (10) of the player station. Whenever a
10   player purchases credit in this manner, the gaming server (2) credits that player's
        credit account balance in the player database (15) with an amount equivalent to
        the quantity of credit purchased by the player. The player's credit balance is
        displayed on the display monitor (6) of the player station (3) at all times during a
        player's playing session. Each player station (3) accepts wagers in only one
15   denomination. Various standard wager denominations are supported by the
        gaming system (1), each standard denomination being an integral or a fractional
        number of units of credit. In this particular embodiment, the standard wager
        denominations are 0.25, 0.5, 1, and 5 units of credit.

20   The gaming server (2) also maintains a player station database (17) that contains
        player station data corresponding to each player station (3) in the gaming system
        (1). The player station data includes the unique identification code of a player
        station (3), a standard wager denomination of the player station, and a
        corresponding geographical location of that player station. The player station
25   database (17) is indexed by player station identification code.

        The server process (13) in the gaming server (2) is capable of determining
        whether any wager placed by any player on a turn of the three-reel video slots
        game is successful or unsuccessful according to the rules of the game. In
30   particular, once a player has placed a wager on a turn of the game, and the
        gaming server has determined a corresponding outcome of that turn of the game,
        the server process determines whether the wager is successful or unsuccessful
        in the following manner: the game of video slots has a plurality of possible
        outcomes, of which one or more may be favourable outcomes with the remainder
35   being unfavourable outcomes. Each one of the favourable outcomes causes the
        player to win a prize of a corresponding quantity of credit. The gaming server (2)

5   determines the status of a wager to be successful if the outcome of the turn of
       the game is a favourable outcome, and unsuccessful if the outcome of the turn of
       the game is not a favourable outcome. The gaming server (2) settles each
       successful player wager by crediting the credit account of the player by an
       amount of credit equivalent to the prize won by the player.

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       A player can terminate his playing session by activating a "CASHOUT" button on
       the pushbutton panel (8) of his player station, whereupon the client process (12)
       of the player station causes a bar-coded ticket to be printed on the thermal printer
       (11) of the player station. The player can then present the bar-coded ticket to an
15   operator of the gaming system (1) and exchange it for monetary value equivalent
       to the balance of the credit in the player's credit account.

       The gaming server (2) also maintains a transaction database (16) of transaction
       data relating to any wager on the game by any player at any player station (3).
20   The transaction data includes, for each turn of the game, a player identification
       code of the player, a size of the wager, a time and date when the turn of the
       game occurred, a player station identification code of a player station (3) at which
       the player is playing, an outcome of the turn of the game, a status of the wager,
       the status being successful if the outcome of the turn of the game is a favourable
25   outcome, and unsuccessful if the outcome of the turn of the game is not a
       favourable outcome, and a corresponding prize won by the player if the status of
       the wager is successful.

       The application web server (14) executes a management information software
30   program (18), which can be configured to analyse the transaction data in the
       transaction database (16) and to produce management reports according to the
       needs of particular application. In particular, the management information
       software program (18) can be configured to produce a report on net wins or
       losses per player in the player register, per single player station (3), per group of
35   player stations whose geographical location falls within a selected geographic
       area, or for the gaming system (1) as a whole. It will be appreciated by those

5   skilled in the art that it will be necessary for the application web server (14) to interrogate, via the gaming server (2), the contents of each of the player database (15), the transaction database (16) and the player station database (17) to produce management reports of the type mentioned above.

10   The management information software program (18) of the application web server (14) can also be configured to accumulate a proportion, in this embodiment 3%, of all player wagers in an accumulation account (not shown). The contents of the accumulation account (not shown) may be utilised by an operator of the gaming system (1) for purposes of social responsibility. As an
15   illustration, the management information software program (18) may be configured to report on net win for all player stations falling within a predetermined underprivileged area, and the operator of the gaming system (1) may elect to reimburse the underprivileged community out of the social responsibility account for all losses incurred by any players at player stations
20   falling within the underprivileged area. It will be further appreciated by those skilled in the art that the management information software program (18) may also be configured to produce reports for the purpose of making fiscal payments to a competent tax authority.

25   Numerous modifications are possible to this embodiment without departing from the scope of the invention. In particular, the game of chance offered for play be the gaming system (1) may be a game of video poker or video blackjack instead of the game of video slots described above. Alternatively, gaming system (1) may offer a plurality different of games for play at any player station (3), a player being
30   able to select, from a menu, any one of the available games for play. Further, a touch screen may replace the display monitor (6) on each display station (3), permitting the pushbutton panel on each display station to be dispensed with. Still further, the player identification code may be issued by an operator of the gaming system (1) instead of being derived from a player identification token. Yet further,
35   the system may be such as to require a player to purchase credit at a player station (3) by means of a payment token such as a credit card or a debit card,

5   instead of by means of coins or banknotes as described above. As a further alternative, a player may be required to purchase credit from a vending station. It is envisaged that, in this scenario, the player would be presented with a voucher encoded with an amount of credit purchased by the player, and the player would then transfer the credit to the player's credit account by keying in the voucher

10   code by means of the numeric keypad (7) on the player station (3). Finally, the application web server (14) may be configured to derive game statistics from the transaction database (16) that can be used to verify the performance, stability and fairness of any game offered by the gaming system (1).

15   The invention therefore provides a gaming system that enables the determination of wins and losses by players according to geographic location and that permits the implementation of social responsibility projects for disadvantaged communities.